US Army Corps of Engineers®
North Pacific Division

Columbia River Update

Volume 1 Issue #3 http://www.npd.usace.army.mil/#news April 15, 1997

Public Affairs Office 503-808-3710

New Hotline For Instant Updates

Updated river flows and project operation data can now be obtained by calling the Corps Water Management hotline at **503-808-3989**. Information will be updated several times a week.

Don't forget to check out the Water Management and Technical Management Team web pages accessible through the Division's home page address listed above.

Seasonal Volume Forecast

While there has been some snowmelt at lower elevations, snow continues to accumulate at higher elevations. Across the Columbia Basin, snowpack averages more than 150% of normal at most monitoring sites.

Runoff volume forecasts at three key flood control points in the Columbia-Snake system for April to September show Grand Coulee at 129% of normal; Lower Granite at 150% of normal; and The Dalles at 134% of normal. The April water supply forecast confirms earlier reports that this will be one of the largest runoff seasons on record.

Anticipated Flows

The April final forecast estimates that The Dalles could see peak flows ranging from 475,000 - 555,000 cubic feet per second (cfs) and Lower Granite peak flows from 260,000 to 343,000 cfs this spring/summer.

Construction

Though engineers had hoped to have four spill deflectors at John Day Dam completed by May 1 of this year, high flows have seriously hampered construction. The revised schedule shows completion of two deflectors by the end of the month.

Surface bypass prototype modifications at Lower Granite Dam were completed on schedule and finished up last week. Testing of the bypass began April 14 and will last throughout the summer.

Dissolved Gas

All 30 dissolved gas monitoring stations are installed and operational. Total dissolved gas (TDG) levels in the Columbia and Snake rivers have hovered around 120% during the most recent two-week period. At certain locations, TDG levels have sporadically risen to 122-123%. TDG level below Ice Harbor has fluctuated between 120-122% recently while levels below Bonneville Dam have fallen to around 110-115%.

Spill for salmon began April 10 at the Lower Snake projects in accordance with the National Marine Fisheries Services biological opinion. The Corps Reservoir Control Center attempts to keep flows at about 100,000 in the Snake River system. Lower Granite and Little Goose will spill 80% of river flow; Lower Monumental, 81%; and Ice Harbor, 27% to achieve fish passage efficiency. Spill at the Columbia River projects will begin April 20.

Spill is reduced when the 12-hour average TDG concentration exceeds 115% of saturation in the forebay of any Snake or lower Columbia River dam or when the 12-hour average in the tailrace area exceeds 120%. Total dissolved gas caps help ensure that adult and juvenile migrant fish are not exposed for an extended period to TDG levels greater than 115%, minimizing the development of gas bubble disease.

Oregon is expected to reach a decision on April 18 on whether to extend the waiver from its state water quality standard of 110% to allow 115/120% TDG levels during the fish migration season.

Fish Transportation

The Corps of Engineers plans to implement the following transportation operations in 1997 to meet or exceed the 50% transport request of the National Marine Fisheries Service: Transport all collected fish at Lower Granite; transport all fish from the A-side of the separator as well as all sample tank fish while bypassing all fish from the B-side at Little Goose and Lower Monumental (larger fish). Bypassed fish will be released continually throughout the day/night as they are collected. Fish collection numbers at Lower Granite are nearly 10-fold that of a year ago (28,000 vs. 2,500). Hatchery steelhead account for 93% of species.